

Proceedings of the



AUGUST 6-11, 2000

HAWAI'I CONVENTION CENTER

HONOLULU, HAWAI'I



Proceedings of the

**INTERNATIONAL MARINE DEBRIS CONFERENCE
ON DERELICT FISHING GEAR AND THE OCEAN ENVIRONMENT**



The Hawaiian Islands Humpback Whale National Marine Sanctuary and its partners acknowledge and thank Senator Daniel K. Inouye for his vision and support of the conference.

August 6-11, 2000

Hawai'i Convention Center

Honolulu, Hawai'i

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FOREWORD

The International Marine Debris Conference on Derelict Fishing Gear and the Ocean Environment was convened to address the Pacific-wide nature of lost and discarded fishing gear and its impacts on protected species, coral reefs, and the marine environment.

The conference attempted to address the problem of derelict fishing gear at its source. Evaluation of netting removed from coral reefs during multi-agency cleanup efforts in the Northwestern Hawaiian Islands indicated to National Marine Fisheries Service (NMFS) officials at the Honolulu Laboratory that the majority of recovered debris was not originating locally but rather from other fisheries operating in the North Pacific, including Asia and Alaska.



Bob Rock, Marine Debris Communications Committee

Artist Robert Lyn Nelson (left) and President of the Ocean Futures Society Jean Michel Cousteau (right) during the unveiling of the Conference poster.

Funding for the conference was provided by the U.S. Congress to the National Oceanic and Atmospheric Administration's Hawaiian Islands Humpback Whale National Marine Sanctuary. Congress charged the agency with the overall organization of the conference and with the directive to bring together a diverse group of individuals from industry, government, and the public sector to assess the Pacific-wide nature of derelict fishing gear and develop specific recommendations and strategies for action.

The conference convened in Honolulu, Hawai'i on August 6-11, 2000. Representatives from across the Pacific came together to share ideas and develop a list of recommendations and detailed strategies for action including Chile, Taiwan, Japan, Australia, New Zealand, American Samoa, and Micronesia.

Among the recommendations were calls for:

- u an international action plan,
- u greater attention to marine debris issues by members of the International Maritime Organization and various UN Regional Seas Programs, and
- u public and private partnerships to assist in the implementation and compliance of international agreements and guidelines.

This proceedings document is a compilation of the papers, speaker presentations, and recommendations developed by the conference participants. We hope that the recommendations will be shared amongst colleagues and that collaborative multi-agency and international efforts will continue to produce solutions to this problem.

Naomi McIntosh
Conference Organizer
Honolulu, Hawai'i

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NOAA, National Marine Fisheries Service, Southwest Fisheries Science Center, Honolulu Laboratory
NOAA, National Ocean Service

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U.S. Department of State
U.S. Environmental Protection Agency
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CONFERENCE POSTER
Robert Lyn Nelson

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U.S. Senator Daniel K. Inouye

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Bob Rock, Marine Debris Communications Committee

Likeke Bell opens the Conference by blowing the pu (conch shell). Seated left to right on the platform are conference speakers Honolulu Mayor Jeremy Harris, Jim Cook (WESPAC), and James Coe (NMFS) and conference hosts Kitty Simonds (WESPAC) and Allen Tom (HIHWNMS).

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INTRODUCTION

On August 6-11, 2000 the Hawaiian Islands Humpback Whale National Marine Sanctuary, along with its multi-agency partners, sponsored the International Marine Debris Conference on Derelict Fishing Gear and the Ocean Environment. The objectives of the conference were to: (1) review sources and impacts of derelict fishing gear; (2) assess and identify new technology for mitigation and prevention; (3) establish international and national partnerships; (4) increase international and national public awareness; and (5) develop recommendations for future actions.

To help stimulate ideas and recommendations on these matters, six issue papers were distributed to participants prior to the conference. The issue papers served to form a foundation for discussions within each of six separate working groups examining policy and legal issues, impacts of marine debris, source identification, industry considerations and actions, monitoring and removal, and education and outreach.

The conference was convened to bring together representatives from government and academia as well as environmental and industry groups to evaluate past, present, and future mitigation efforts. A total of 278 individuals participated from 20 countries and 15 states. Twenty-eight speakers were invited to give oral presentations and share their research findings on the scope of the derelict fishing gear problem and current efforts aimed at addressing the issue. U.S. Senators Daniel K. Inouye and Daniel K. Akaka, U.S. Representatives Neil Abercrombie and Eni Faleomavaega, and Under Secretary on Oceans and Atmospheres and Director of NOAA Dr. D. James Baker were among those invited to share their views on issues associated with marine debris. In addition and in conjunction with the conference, August 6-12 was proclaimed Marine Debris Awareness week in the state of Hawai’i by Governor Benjamin Cayetano. Mayor Jeremy Harris also proclaimed Marine Debris Education week for the City and County of Honolulu to urge all citizens to play an active role in solving the problems of marine debris.

Based on the issue papers and other papers presented at the conference, a list of recommended actions were developed for each of the six focus topics. Consequently, conference participants detailed thirty priority recommendations and strategies for future action. These recommendations underscore the importance of international cooperation in addressing the derelict fishing gear issue in the North Pacific Ocean.

What follows is a summary of the information, ideas, and recommendations presented and developed at the conference to reduce the impact of derelict fishing gear on the ocean environment.



Bob Rock, Marine Debris Communications Committee

The Hawai’i Convention Center, scene of the International Marine Debris Conference.



Bob Rock, Marine Debris Communications Committee

International Marine Debris Conference participants enjoy a luau on the grounds of Bishop Museum.



Proclamation

WHEREAS, Hawaii is home to more than fourteen-thousand square miles of coral reef ecosystems that support over five-thousand marine plants and animals; and

WHEREAS, the coral reefs surrounding the Hawaiian archipelago represent nearly eighty-four percent of all coral reefs under the jurisdiction of the United States; and

WHEREAS, Hawaii has the fourth longest coastline in the United States and is surrounded by an economic zone that encompasses an area of more than nine-hundred thousand square miles; and

WHEREAS, Hawaii's coral reefs protect shorelines from waves and storm surges and provide refuge for juvenile fish and essential habitats for many species; and

WHEREAS, marine debris is harmful because it abrades reef corals, entangles seabirds, sea turtles and Hawaiian monk seals, and advances the introduction of alien marine species; and

WHEREAS, more than thirty-five tons of derelict fishing nets have been removed from the reefs and shorelines of our archipelago, and an estimated two- to three-thousand tons remain; and

WHEREAS, the International Marine Debris Conference will be held at the Hawaii Convention Center from August 6 through 12, 2000, to evaluate the ecological, economic, social and political influences of maritime sources of marine debris in Hawaii and the Pacific;

NOW, THEREFORE, I, BENJAMIN J. CAYETANO, Governor of the State of Hawaii, do hereby proclaim August 6 through 12, 2000, to be

MARINE DEBRIS AWARENESS WEEK

in Hawaii, and congratulate participating agencies for helping to protect our marine environment.

DONE at the State Capitol, in the Executive Chambers, Honolulu, State of Hawaii, this third day of July, 2000.

Benjamin J. Cayetano

OFFICE OF THE MAYOR CITY AND COUNTY OF HONOLULU PROCLAMATION

WHEREAS, debris that washes up on the shores of our beautiful islands takes its toll on marine life, coral reefs, and beaches; and

WHEREAS, the City and County of Honolulu has established a partnership with community groups and other government agencies to raise awareness and concern over the effects of marine debris; and

WHEREAS, thousands of volunteers have cleaned reefs and beaches to preserve Oahu's unique marine life, improve recreational areas, and support appropriate economic development; and

WHEREAS, the City also assisted in the removal of over 35 tons of fishing nets that damaged coral reefs and marine life at French Frigate Shoals; and

WHEREAS, as caretakers of the environment, we have a responsibility to ensure that future generations enjoy these ocean resources,

NOW, THEREFORE, I, JEREMY HARRIS, Mayor of the City and County of Honolulu, do hereby proclaim August 6 through 12, 2000, as

MARINE DEBRIS EDUCATION WEEK

in the City and County of Honolulu, and I encourage our citizens to support the International Marine Debris Conference and become more aware of the effects that marine debris has on our fragile environment.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the City and County of Honolulu to be affixed.

Done this 6th day of August, 2000, in Honolulu, Hawaii.



Jeremy Harris
JEREMY HARRIS, Mayor
City and County of Honolulu



**INTERNATIONAL MARINE DEBRIS CONFERENCE ON
DERELICT FISHING GEAR AND THE OCEAN ENVIRONMENT
PARTICIPANTS' DECLARATION OF RESOLVE**

Honolulu, Hawai'i • 6-11 August 2000	
RECOGNIZING	<ul style="list-style-type: none"> • the harmful and persistent effects of accumulating derelict fishing gear and other marine debris on marine flora and fauna, ecosystem integrity, and vessel safety, • that all stakeholders are shipmates and share responsibility for stewardship and conservation of marine resources, • the exigency to enhance communication, cooperation, and sharing of ideas and resources among various resource users, groups delegated conservation and management responsibilities, conservation organizations, and the general public, and • the clear requisite to galvanize the accomplishments of the Conference and spur progress in resolving ecological and economic impacts of derelict fishing gear.
REAFFIRMING	Reaffirming the "Fisherman's Pledge For a Clean Ocean" adopted by the North Pacific Rim Fishermen's Conference on Marine Debris in 1987, and emphasizing its importance as a tool to address the problem of derelict fishing gear in the marine environment;
RECALLING	Recalling the principles and obligations regarding marine pollution by lost or abandoned fishing gear as embodied in the FAO Code of Conduct for Responsible Fisheries, the United Nations Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks, the UN Convention on the Law of the Sea, Annex V of the International Convention for the Prevention of Pollution from Ships (a.k.a. MARPOL 73/78), and the Guidelines for the Implementation of Annex V;
RECALLING FURTHER	Recalling further, that in giving effect to these obligations, Parties should adopt and implement measures to minimize the loss and maximize the recovery of fishing gear with the strategic goal of eliminating adverse impacts of derelict fishing gear on the marine environment and vessel safety;
COMMITTING	Committing to the productive application of the efforts and recommendations of this Conference;
THE PARTICIPANTS OF THE CONFERENCE RECOGNIZE	The Participants of the Conference Recognize, that in analyzing the significant problem of marine debris, it is the responsibility of all States to take concerted action to prevent the discard and loss of fishing gear into the world's oceans and to endeavor to reduce the effects of derelict fishing gear through education, outreach, and removal programs;
CONSEQUENTLY	Consequently, and as a matter of priority, the Participants of the International Marine Debris Conference in Honolulu, Hawai'i (6-11 August 2000) recall the key recommendations of the Conference and resolve to diligently pursue those recommendations to:

1. Establish an International Plan of Action to prevent the discard, minimize the loss, and maximize the recovery of fishing gear;
2. Develop mechanisms to improve reporting of lost fishing gear and complying with international and domestic legal regimes to prevent and mitigate the effects of fishing gear loss;
3. Identify and quantify the adverse effects of ghost-nets, and other derelict fishing gear, and promote ongoing and new efforts to remove these sources of danger to marine life and vessels;
4. Identify the sources of derelict fishing gear with the objective of refining efforts to prevent loss and discard of fishing gear by targeting education efforts and engaging industry to develop outreach programs for these fishing communities;
5. Establish standardized protocols to map locations of commercial fishing and aquaculture activities using Geographic Information System (GIS) techniques;
6. Consider “effort-rationalization” management approaches as tools to reduce loss of commercial fishing gear;
7. Develop broad-based, private-public partnerships to fund programs to recover derelict fishing gear, to provide long-term funding for education and outreach activities, and to develop appropriate infrastructures for effective implementation and enforcement of measures to prevent discard and loss of fishing gear and the recovery of derelict fishing gear;
8. Alert government agencies to the urgency of addressing derelict fishing gear as national and international priorities and the need to bring this issue of concern to the attention of appropriate regional and international ocean governance institutions, organizations, and regimes; and
9. Promote the development of broad-based education programs, particularly those that may use emerging technologies, to (a) educate all stakeholders about derelict fishing gear impacts and programs that have been successful in resolving impact issues, and (b) disseminate information on initiatives and programs for prevention, mitigation, and monitoring of the impacts of derelict fishing gear.